

**-Related Applications**

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This application is a continuation of and claims the right of priority to United States Patent Application Serial No. 09/237,317 filed 01/26/99, the entirety of which application is incorporated herein by reference.

**Field of Invention--**

**IN THE CLAIMS**

**Please cancel Claims 2-41 without prejudice to reinstate.**

**Add claims 42-65 as follows:**

*a2*  
5     -42.     (New) A universal mobile ID (UMID) system for use in an open networked environment wherein a client device including devices other than personal computers running under standard operating systems is employed by a user to download content from a remote content server computer via said network, comprising:

10           a device-specific information stored in said client device specifying device hardware and/or software characteristics of said client device, including at least one characteristic selected from the set consisting of: a processor characteristic or type, an available memory size, a multimedia capability, a display characteristic or type, a display resolution, a display color depth, a device memory size, a World Wide Web (www) browser type, a client device date of manufacture, a client device date of birth, a client device locality, and combinations thereof;

15           said device-specific information comprising a portion that is automatically communicated to said server when said client device is coupled to said network;

          a machine-to-machine communications protocol for said client device sending at least said portion of said device-specific information to said remote content server when coupled with said client device by said network and for said server computer to receive said device-specific information from said client device;

20           a device recognition process associated with said content server computer for identifying hardware and/or software characteristics of said client device based on said received portion of said device-specific information;

          a content customization process associated with said content server: (i) receiving said identified client device hardware and/or software characteristics or information derived therefrom, (ii) determining a content customization compatible with a client device of the type having said identified hardware and/or software characteristics after receiving said portion of said device-specific information, and (iii) customizing said content based at least in part on said portion of said device-specific information, said customization including at least a customization selected from the set consisting of: a content size customization to customize the size of said content to fit within said available memory size, a multimedia customization to customize said content to said multimedia capabilities of said device, a display characteristic or type customization to customize said content to said display characteristic or type, a display resolution

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customization to customize said content to said display resolution, a display color depth customization to customize said content to said display color depth, a device memory size customization to customize a size of said content to fit within said device memory size, a World Wide Web (www) browser type customization to customize said content to said World Wide Web browser type, a client device date of manufacture or client device date of birth customization to customize said content for said client device date of manufacture or said client device date of birth, a client device locality customization to customize said content to said client device locality; and

a machine-to-machine communications protocol for communicating said compatible customized content from said server computer to said client device over said network.

43. (New) The universal mobile ID system of claim 42, wherein said device-specific information, includes at least one of hardware and/or software attributes of said client device that can be used by said server computer to customize said content so that it is suitable for at least processor, display, and available memory size attributes of said client; and date of manufacture of said client.

44. (New) The universal mobile ID system of claim 43, further comprising:  
user-specific information, including at least one of: user preferences that can be used by said server to customize said content, and access rights that can be used by said server to limit access of the user to said content; and

at least a subset of the user preferences, access rights and device attributes when present being dynamically modifiable by any combination of the user and a client program executing on the client device.

45. (New) The universal mobile ID system of claim 44, further comprising:  
a digital content rights management process, said digital content rights management process including a public PIN which is unique to each client ; said public PIN, and said at least one of the user-specific information and the device-specific information being transmitted to the server by the client to enable the server to appropriately configure said content to be downloaded to the client device from said server.

46. (New) The universal mobile ID system of claim 42, wherein said device-specific information comprises a device identifier (DID) that is automatically communicated to said server when said client device is coupled to said network.

47. (New) The universal mobile ID system of claim 42, wherein said standard operating systems consist of a Microsoft Windows operating system.

48. (New) The universal mobile ID system of claim 42, wherein said network comprises an open network environment including at least one network server, said server communicating customized content to clients based at least in part on said device identifier and without any other prior knowledge of the client device configuration.

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49. (New) The universal mobile ID system of claim 42, wherein said network comprises the Internet and said client device is selected from the group consisting of handheld devices and cellular phones.

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50. (New) The universal mobile ID system of claim 46, wherein said device characteristics are contained within said device identifier (DID), and said device identifier (DID) and a user identifier (UID) comprises two portions of a universal mobile ID (UMID) that in combination designate the client device characteristics and user preferences.

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51. (New) The universal mobile ID system of claim 50, wherein said UID includes information that is relevant to a user, said information selected from the group of information items consisting of: a unique, public personal identification number (PIN), content preferences, content access rights, network access rights, and combinations thereof.

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52. (New) The universal mobile ID system of claim 46, wherein said device identifier (DID) is stored or otherwise fixed in said client device and communicated without need for any encryption or security precautions as the DID is intended to be publicly exchanged with any server to initiate the transmission of content.

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53. (New) The universal mobile ID system of claim 42, wherein a program executing in said client device is adapted to dynamically modify said device-specific information before it is transmitted to the server so that the content may be filtered and communicated and transmitted to said client device in accordance with the modified device-specific information.

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54. (New) The universal mobile ID system of claim 42, wherein said device specific information includes a device identifier (DID) and wherein said dynamic modification of said DID comprises modification of a field within said DID to allow the available memory, network connection communication speed, client device locality, and combinations thereof, to identify alternative features or upgrades to said client device.

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55. (New) The universal mobile ID system of claim 54, wherein said client device can freely and dynamically modify said DID to indicate a memory size parameter to prevent the server from sending the client more content data than it has memory to receive

56. (New) The universal mobile ID system of claim 46, wherein said DID may be dynamically modified inform said server of any device parameter that impacts at least one of: size of the content that can be stored in client memory; bandwidth of the content that can be transmitted between the client computer and the server computer; complexity of the content that can be accessed by the client computer; available network capacity, processor capability, available processor capacity, client geographic position, and client time zone; and geographic relevance of the content.

57. (New) The universal mobile ID system of claim 42, wherein said client device is coupled to said network directly, or coupled via an Internet Service Provider (ISP), or coupled via a mediation server.

58. (New) The universal mobile ID system of claim 46, wherein prior to requesting content on behalf of a user, said client communicates said device identifier to said server hosting said requested content, and in light of this said device identifier and requested content, the server customizes and downloaded content for the client and user.

59. (New) The universal mobile ID system of claim 42, wherein said content is selected from the group of content items consisting of: books, magazines, movies, video games, sports, and combinations thereof.

60. (New) The universal mobile ID system of claim 42, wherein:

said device-specific information comprises a device identifier (DID) identifying at least one of hardware and/or software attributes of said client device that can be used by said server computer to customize said content so that it is suitable for at least processor, display, and available memory size attributes of said client; and date of manufacture of said client;

said content customization comprises filtering said content to reduce the amount and/or complexity of said content;

said client device locality includes at least one of a city, state, country, and time zone for the client device;

said device characteristics are identified by reference to an external database accessible to said server using said DID;

said network comprises an open network environment including at least one network server, said server communicating customized content to clients based at least in part on said device identifier and without any other prior knowledge of the client device configuration;

said network comprises the Internet and said client device is selected from the group consisting of handheld devices and cellular phones;

said device identifier (DID) and a user identifier (UID) comprises two portions of a universal mobile ID (UMID) that in combination designate the client device characteristics and user preferences, said UID includes information that is relevant to a user, said information selected from the group of information items

consisting of: a unique, public personal identification number (PIN), content preferences, content access rights, network access rights, and combinations thereof;

said UMID comprising said DID and said UID is stored and communicated without security precautions as the UMID is intended to be publicly exchanged with any server to initiate the transmission of content;

said content is selected from the set of content from the group of content items consisting of: books, magazines, movies, video games, sports, subscription content, and when subscription content further comprising: subscription information indicating particular types of subscription content, the server downloading the subscription content as appropriate in a push mode operation; and combinations thereof;

said DID may be dynamically modified inform said server of any device parameter that impacts at least one of: size of the content that can be stored in client memory; bandwidth of the content that can be transmitted between the client computer and the server computer; complexity of the content that can be accessed by the client computer; geographic relevance of the content; available network capacity; processor capability available processor capacity; client geographic position; and client time zone; and

prior to requesting content on behalf of a user, said client communicates said device identifier to said server hosting said requested content, and in light of this said device identifier and requested content, the server customizes and downloaded content for the client and user.

61. (New) The UMID system of claim 45, further comprising:

a secret PIN associated with the client accessible to the client and the server. the secret PIN is generated by a client security program executing on the client and is transmitted to the server in a secure manner;

wherein the secret PIN is used by the server, when the content is encrypted, to generate a decryption factor with which the client, in conjunction with the secret PIN, can decrypt the encrypted content;

the secret PIN is stored on both the client and the server at birth.

the secret PIN stored on the client is encrypted prior to storage with an encryption key derived at least partially using biometric information taken from the user.

the secret PIN is generated using at least one of: (1) hardware/software configuration information assumed to be unique for the client; (2) patterns of bits in selected files stored on the client; and (3) a set of biometric information associated with the user.

62. (New) The system of claim 42, wherein said client device comprises a portable device other than a personal computer.

63. (New) A method for providing content to a client device in an open networked environment wherein a client device is employed by a user to download content from a content server via said network; the method comprising:

assigning the client an identifier which includes device-specific information that can be used by the server to customize the content so that it is suitable for use on the client device;

associating in the server each different client identifier with content attributes appropriate for each said client device having said different client identifier;

determining content stored on the server to be downloaded to the client;

customizing said content to be downloaded from said server to said client using at least a subset of said client identifier including said device-specific information; and

downloading the customized content to the client.

64. (New) A dynamically configurable universal mobile ID for use in a client device configured to download content from a server computer, said dynamically configurable universal mobile ID including device information that describes a configuration of said client, at least a subset of said device information being dynamically modified by the client device;

said dynamically configurable universal mobile ID being transmitted to said server computer to enable said server computer to customize the content to be downloaded to the client device;

said device information including device parameters impacting at least one of: size of the content that can be stored in a memory of said client device, bandwidth of the content that can be transmitted between the said client device and the server computer, complexity of the content that can be accessed by said client device, and geographic relevance of the content based on the geographic location of said client device; and

said dynamically configurable universal mobile ID device information including at least one of: network connection speed between said client device and said server computers, available network capacity, client device processor capability, client device available processor capacity, available client device memory, client device geographic position, and client device time zone.

65. (New) A method for recognizing a device and customizing content for said recognized client device based on said recognition upon connection of said client device to an open network, said method comprising:

receiving a device-specific information by a server from a client to which content is to be downloaded, said device-specific information permitting identification by said server of hardware and/or software characteristics of said client device relevant to the selection, volume, and/or format of said content to be downloaded;

recognizing said hardware and/or software characteristics of said client device based on said received device-specific information;

determining a content customization compatible with a client device of the type having said identified hardware and/or software characteristics after receiving said device-specific information; and